

Patent PCT/EP 24 MAR 2005
10/510506

SEQUENCE LISTING

<110> Evotec NeuroSciences GmbH

<120> Diagnostic and therapeutic use of Vault polynucleotides
and proteins for neurodegenerative diseases.

<130> P67785US1

<140> PCT/EP03/03626

<141> 2002-04-08

<150> 02007820.0

<151> 2002-04-08

<150> US 60/370,214

<151> 2002-04-08

<160> 14

<170> PatentIn Ver. 2.1

<210> 1

<211> 35

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: ADPRTL1 cDNA
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<210> 2

<211> 1724

<212> PRT

<213> Homo sapiens

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Tyr Leu Pro Gln Gln Lys Lys Lys Leu Gln Thr Asp Ile Lys Glu
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Asn Gly Gly Lys Phe Ser Phe Ser Leu Asn Pro Gln Cys Thr His Ile
35 40 45

Ile Leu Asp Asn Ala Asp Val Leu Ser Gln Tyr Gln Leu Asn Ser Ile
50 55 60

Gln Lys Asn His Val His Ile Ala Asn Pro Asp Phe Ile Trp Lys Ser
65 70 75 80

Ile Arg Glu Lys Arg Leu Leu Asp Val Lys Asn Tyr Asp Pro Tyr Lys
85 90 95

Pro Leu Asp Ile Thr Pro Pro Pro Asp Gln Lys Ala Ser Ser Ser Glu

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Thr	Val	Glu	Leu	Thr	Glu	Phe	Gly	Met	Gln	Asn	Val	Glu	Ile	Pro
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Leu	Pro	Gln	Asp	Phe	Glu	Val	Ala	Lys	Tyr	Asn	Thr	Leu	Glu	Lys
145					150					155				160
Gly	Met	Glu	Gly	Gly	Gln	Glu	Ala	Val	Val	Val	Glu	Leu	Gln	Cys
				165					170					175
Arg	Asp	Ser	Arg	Asp	Cys	Pro	Phe	Leu	Ile	Ser	Ser	His	Phe	Leu
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Asp	Asp	Gly	Met	Glu	Thr	Arg	Arg	Gln	Phe	Ala	Ile	Lys	Lys	Thr
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Glu	Asp	Ala	Ser	Glu	Tyr	Phe	Glu	Asn	Tyr	Ile	Glu	Glu	Leu	Lys
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Gln	Gly	Phe	Leu	Leu	Arg	Glu	His	Phe	Thr	Pro	Glu	Ala	Thr	Gln
225					230					235				240
Ala	Ser	Glu	Gln	Leu	Gln	Ala	Leu	Leu	Leu	Glu	Glu	Val	Met	Asn
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Ser	Thr	Leu	Ser	Gln	Glu	Val	Ser	Asp	Leu	Val	Glu	Met	Ile	Trp
			260					265					270	Ala
Glu	Ala	Leu	Gly	His	Leu	Glu	His	Met	Leu	Leu	Lys	Pro	Val	Asn
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Ile	Ser	Leu	Asn	Asp	Val	Ser	Lys	Ala	Glu	Gly	Ile	Leu	Leu	Leu
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Glu	Val	Asn	Leu	Gly	Leu	Leu	Ala	Lys	Lys	Ala	Asp	Leu	Cys	Gln
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Pro	Pro	Ser	Leu	Ala	Lys	Tyr	Arg	Ala	Leu	Arg	Cys	Lys	Ile	Glu
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Val	Glu	Gln	Asn	Thr	Glu	Glu	Phe	Leu	Arg	Val	Arg	Lys	Glu	Val
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Gln	Asn	His	His	Ser	Lys	Ser	Pro	Val	Asp	Val	Leu	Gln	Ile	Phe
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Ser	Leu	Ser	Thr	Ser	Ile	Lys	Tyr	Ser	His	Pro	Gly	Glu	Thr	Asp	Gly
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Thr	Arg	Leu	Leu	Leu	Ile	Cys	Asp	Val	Ala	Leu	Gly	Lys	Cys	Met	Asp
			500					505						510	
Leu	His	Glu	Lys	Asp	Phe	Ser	Leu	Thr	Glu	Ala	Pro	Pro	Gly	Tyr	Asp
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Val	Phe	Gln	Thr	Tyr	Thr	Asn	Lys	Ser	His	Val	Pro	Ile	Glu	Ala	Lys
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Pro	Glu	Lys	Glu	Ser	Glu	Ala	Cys	Met	Leu	Val	Phe	Gln	Pro	Asp	Leu
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Ser	Leu	Leu	Tyr	Pro	Ala	Arg	Gly	Ser	Arg	Asn	Ile	Leu	Leu	Val	Ser
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Lys	Trp	Gln	Gln	Leu	Asn	Pro	Asp	Ala	Pro	Glu	Ala	Leu	Gln	Ala	Pro

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Lys Glu Phe Cys Thr Met Val Ser Thr Thr Glu Leu Gln Lys Thr Thr 1105 1110 1115 1120		
Gly Thr Met Ile His Lys Leu Ala Ala Arg Ala Leu Ile Arg Asp Tyr 1125 1130 1135		
Glu Asp Gly Ile Leu His Glu Asn Glu Thr Ser His Glu Met Lys Lys 1140 1145 1150		
Gln Thr Leu Lys Ser Leu Ile Ile Lys Leu Ser Lys Glu Asn Ser Leu 1155 1160 1165		
Ile Thr Gln Phe Thr Ser Phe Val Ala Val Glu Lys Arg Asp Glu Asn 1170 1175 1180		
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Glu Asp Val Asp Phe Leu Pro Tyr Met Ser Trp Gln Gly Glu Pro Gln 1205 1210 1215		
Glu Ala Val Arg Asn Gln Ser Leu Leu Ala Ser Ser Glu Trp Pro Glu 1220 1225 1230		
Leu Arg Leu Ser Lys Arg Lys His Arg Lys Ile Pro Phe Ser Lys Arg 1235 1240 1245		
Lys Met Glu Leu Ser Gln Pro Glu Val Ser Glu Asp Phe Glu Glu Asp 1250 1255 1260		
Gly Leu Gly Val Leu Pro Ala Phe Thr Ser Asn Leu Glu Arg Gly Gly 1265 1270 1275 1280		
Val Glu Lys Leu Leu Asp Leu Ser Trp Thr Glu Ser Cys Lys Pro Thr 1285 1290 1295		
Ala Thr Glu Pro Leu Phe Lys Lys Val Ser Pro Trp Glu Thr Ser Thr 1300 1305 1310		
Ser Ser Phe Phe Pro Ile Leu Ala Pro Ala Val Gly Ser Tyr Leu Thr 1315 1320 1325		
Pro Thr Thr Arg Ala His Ser Pro Ala Ser Leu Ser Phe Ala Ser Tyr 1330 1335 1340		
Arg Gln Val Ala Ser Phe Gly Ser Ala Ala Pro Pro Arg Gln Phe Asp 1345 1350 1355 1360		
Ala Ser Gln Phe Ser Gln Gly Pro Val Pro Gly Thr Cys Ala Asp Trp 1365 1370 1375		
Ile Pro Gln Ser Ala Ser Cys Pro Thr Gly Pro Pro Gln Asn Pro Pro		

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Ala Gln Ser Ala Pro Leu Gln His Pro Gly Gly Phe Thr Thr Arg Pro 1410 1415 1420		
Ser Ala Gly Thr Phe Pro Glu Leu Asp Ser Pro Gln Leu His Phe Ser 1425 1430 1435 1440		
Leu Pro Thr Asp Pro Asp Pro Ile Arg Gly Phe Gly Ser Tyr His Pro 1445 1450 1455		
Ser Ala Tyr Ser Pro Phe His Phe Gln Pro Ser Ala Ala Ser Leu Thr 1460 1465 1470		
Ala Asn Leu Arg Leu Pro Met Ala Ser Ala Leu Pro Glu Ala Leu Cys 1475 1480 1485		
Ser Gln Ser Arg Thr Thr Pro Val Asp Leu Cys Leu Leu Glu Glu Ser 1490 1495 1500		
Val Gly Ser Leu Glu Gly Ser Arg Cys Pro Val Phe Ala Phe Gln Ser 1505 1510 1515 1520		
Ser Asp Thr Glu Ser Asp Glu Leu Ser Glu Val Leu Gln Asp Ser Cys 1525 1530 1535		
Phe Leu Gln Ile Lys Cys Asp Thr Lys Asp Asp Ser Ile Pro Cys Phe 1540 1545 1550		
Leu Glu Val Lys Glu Glu Asp Glu Ile Val Cys Thr Gln His Trp Gln 1555 1560 1565		
Asp Ala Val Pro Trp Thr Glu Leu Leu Ser Leu Gln Thr Glu Asp Gly 1570 1575 1580		
Phe Trp Lys Leu Thr Pro Glu Leu Gly Leu Ile Leu Asn Leu Asn Thr 1585 1590 1595 1600		
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Val Lys Gly Arg Glu Cys Leu Leu Asp Leu Ile Ala Thr Met Leu Val 1620 1625 1630		
Leu Gln Phe Ile Arg Thr Arg Leu Glu Lys Glu Gly Ile Val Phe Lys 1635 1640 1645		
Ser Leu Met Lys Met Asp Asp Pro Ser Ile Ser Arg Asn Ile Pro Trp 1650 1655 1660		
Ala Phe Glu Ala Ile Lys Gln Ala Ser Glu Trp Val Arg Arg Thr Glu 1665 1670 1675 1680		
Gly Gln Tyr Pro Ser Ile Cys Pro Arg Leu Glu Leu Gly Asn Asp Trp 1685 1690 1695		
Asp Ser Ala Thr Lys Gln Leu Leu Gly Leu Gln Pro Ile Ser Thr Val		

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<p><210> 3</p> <p><211> 21</p> <p><212> DNA</p> <p><213> Artificial Sequence</p> <p><220></p> <p><223> Description of Artificial Sequence: primer for the human ADPRTL1 gene</p>		
<p><400> 3</p> <p>gatgctgtgc cttggacaga a</p>		21
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<p><400> 4</p> <p>tggtgtaagt ttccagaagc ca</p>		22
<p><210> 5</p> <p><211> 20</p> <p><212> DNA</p> <p><213> Artificial Sequence</p> <p><220></p> <p><223> Description of Artificial Sequence: primer for cyclophilin B gene</p>		
<p><400> 5</p> <p>actgaagcac tacgggcctg</p>		20
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<p><210> 7</p> <p><211> 20</p>		

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer for the
 ribosomal protein S9 gene

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 ggtcaaattt accctggcca 20

 <210> 8
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 <210> 9
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 <223> Description of Artificial Sequence: primer for
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 <400> 9
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 <210> 10
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 <210> 11
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<210> 12
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